IN THE CLAIMS:

Please cancel claim 6 and amend claim 1 as indicated below. Note, that the current listing of claims will replace all prior versions, and listings, of claims in the application:

1. (*Currently Amended*) A method for manufacturing a semiconductor device, comprising:

forming a barrier layer on an individual device formed on a semiconductor substrate, and that includes a MOS transistor;

performing an ozone process on the barrier layer; and

forming a pre-metal dielectric (PMD) layer on the barrier layer that has undergone the ozone process,

wherein the ozone process performed on the barrier layer is performed in a deposition chamber of the PMD layer.

2. (*Original*) The method of claim 1, wherein the ozone process performed on the barrier layer is performed at a temperature at which ozone is resolved.

3. (*Original*) The method of claim 2, wherein the temperature at which ozone is resolved is 500°C.

4. (*Original*) The method of claim 3, wherein the resolved ozone is bonded with a surface of the barrier layer to stabilize the surface of the barrier layer.

5. (*Original*) The method of claim 1, wherein the ozone process performed on the barrier layer is performed for 10~30 seconds.

6. (*Cancelled*).

7. (*Original*) The method of claim 1, wherein a temperature at which the ozone process is performed and a deposition temperature of the PMD layer are substantially identical.

8. (*Original*) The method of claim 1, further comprising heat treating the PMD layer following the formation of the PMD layer.

9. (*Original*) The method of claim 8, wherein the heat treating is performed at a temperature of 600~800°C for 30~50 seconds.

10. (*Original*) The method of claim 1, wherein the barrier layer is a silicon nitride layer.

11. (*Original*) The method of claim 10, wherein the silicon nitride layer is formed to a thickness of 200~400Å.

12. (*Original*) The method of claim 10, wherein the silicon nitride layer is formed by plasma enhanced chemical vapor deposition.

13. (*Original*) The method of claim 1, wherein the PMD layer is formed of a material including boron.

14. (*Original*) The method of claim 1, wherein the PMD layer is formed of boron phosphorous silicate glass (BPSG) to thereby form a BPSG layer.

15. (*Original*) The method of claim 14, wherein the BPSG layer is formed to a thickness of 10,000~20,000Å .

16. (*Original*) The method of claim 14, wherein the BPSG layer is formed by subatmospheric chemical vapor deposition (SACVD).

17. (*Original*) The method of claim 16, wherein the ozone process performed on the barrier layer is performed in an SACVD chamber.

18. (*Original*) The method of claim 16, wherein the BPSG layer is formed in an SACVD chamber at a temperature of approximately 500°C.

19. (*Original*) The method of claim 18, wherein the ozone process performed on the barrier layer is formed in an SACVD chamber at a temperature of approximately 500°C.

20. (*Original*) The method of claim 16, wherein the BPSG layer is formed in an SACVD chamber at a pressure of approximately 200 Torr.